Fig. 16. Ovules of *Euglena viridis* (2 to 2·5-5600ths of an inch long), presenting the "granule" on their circumference, like those of *Spongilla*. (See 'Annals,' vol. xviii. pl. 6. fig. 39, &c.)

Fig. 17. Ditto in supposed process of development, presenting a spiral line: *a*, view of flat surface; *b*, half-view of ditto; *c*, marginal view, showing the projection of the ovule in the direction of the axis of the spire.

Fig. 18. Young colourless specimens of *Euglena* (2 to 3-5600ths of an inch in diameter, which made their appearance in the watch-glass wherein the ovules of *E. viridis* had been placed for development.

Fig. 19. *Euglypha pleurostoma*, H. J. C. (*nov. sp.*?), $\frac{1}{560}$th of an inch long: *a'*, mouth with projection of tentaculiform prolongations of the body; *b'*, body; *c'*, vesiculæ or contracting vesicles; *d'*, nucleus. *a*, lateral view of ditto; *b*, ditto partly filled with ovules; *c*, early state of ovule, $\frac{1}{2800}$th inch in diameter; *d*, subsequent or granuliferous stage of development of ditto; *e*, development similar to that described and figured in *Euglypha alveolata*, in which there appears to be a secondary test developed round a capsule containing granules (see Annals, vol. xviii. pl. 5. figs. 32, 33); *f*, empty test containing supernumerary scales; *g*, ditto, covered with scales *in situ* (scale $\frac{1}{5600}$th inch in diameter); *h*, form and arrangement of the scales; *i*, lateral view of figure *e*, but with secondary test more elliptical.

V.—*Notice of the Animal of* Turbo Sarmaticus *and other Mollusca from the Cape.* By Arthur Adams, F.L.S. &c.

To the Editors of the Annals of Natural History.

Cape of Good Hope, April 11, 1857.

Gentlemen,

Dr. Gray having formed a genus out of the *Turbo Sarmaticus*, on account chiefly of its singular operculum, I was particularly anxious to observe the animal. Making a little excursion therefore to Millar's Point, a wild and rocky spot, I succeeded, after long search, in discovering the haunts of the animal. At low-water, and in fissures in the far-out rocks abounding with green sea-weed, and adhering to the sides of the granite masses where the sea breaks, the *Turbo Sarmaticus* may be found. It is timid, slow-moving, and difficult to observe. The colour is green, spotted and marbled with white, and finely reticulate with dark green. The margin of the mantle is thickened, and just within the edge a dark-green band reposes on the dark-coloured zone on the inside of the outer lip. The rachis of the lingual membrane (a specimen of which I have submitted to the examination of Dr. Gray) has a series of five nearly equal, square teeth, outside of which is a quadridentate, lateral tooth flanked by numerous slender uncini. The upper jaw, composed of two long, cartilaginous pieces, is protected at the tip by a horny

lamina. The head-lobes are very large and rounded, with the front edge crenulate; the eye-pedicel is large, thick, and triangular, with a small, simple eye placed on the outer side near (but not on) the tip; the neck-lappet is very large, occupying two-thirds of the length of the lateral membrane, the free edge deeply divided and pectinate, some of the divisions again divided at the end, or compound, as seen in *Livona pica*, the others smaller and simple. The edge of the lateral membrane is pectinate, and there is a single, long, stout, white, tentacular filament at the extreme hinder part. The opercular mantle, as in this instance it may appropriately be called, is furnished with three very short conical processes on each side, while the front edge is capable of being extended backwards over the entire rough outer surface of the operculum, with the exception of a small portion posteriorly, which is free from the foot below.

The animals of three species of *Oxystele* which I have observed here, namely *O. tigrina*, *O. merula*, and *O. tabularis*, do not differ from each other in any essential respect. They are black, with the head transversely lineated with white; the head-lobes are simple and triangular; the long filiform tentacles are barred with white; the neck-lappets are moderate; the lateral membrane is finely crenulated, and is furnished with three equal filaments on each side, marked, like the tentacles, with white and black, and the sides of the foot are speckled with white.

In my excursions among the rocks I was much struck with the rich variety of *Patellae*, and seized the opportunity of examining the animal of *Helcion pectinatus*, which has the gills arranged round the groove between the mantle and foot exactly as in *Patella*, the animal of which it resembles in every respect. *Helcion* will therefore form a section of *Patella*, as Dr. Gray suggests, and not a genus of *Tecturidæ*, as supposed by my brother and myself in our 'Genera of Recent Mollusca,' p. 460. The animal of the Cape *Nacella* does not differ from that of the British *N. cærulea*. The smooth, thin shell is only found on smooth, rounded stones. The *Patella cochlearis* has the head and neck very elongated, and resting in the gutter of the narrow fore part of the shell; the mantle is also produced in front over the head. This species forms the subgenus *Olana*, H. & A. Adams. The stellate forms of *Patella* forming the subgenus *Scutellastra*, H. & A. Adams, have the margin of the mantle extended into the radiating processes of the shell. The *Patella compressa* is also found here, but I have not succeeded in taking it alive.

I remain, Gentlemen,

Yours very truly,

Arthur Adams.